Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Inquiry on Technical and Operational Wireless E911 Issues	)	WT Docket No. 02-46

COMMENTS OF AT&T WIRELESS SERVICES, INC.

Pursuant to the Wireless Telecommunications Bureau's Public Notice,[1/] released October 16, 2002, AT&T Wireless Services, Inc. ("AWS") hereby respectfully submits its reply comments on the "Report on Technical and Operational Issues Impacting the Provision of Wireless Enhanced 911 Services" ("Hatfield Report" or "Report") prepared by Dale N. Hatfield.[2/]

The Hatfield Report and the comments filed in this proceeding make clear that the primary goal of most wireless carriers today is to provide Phase II E911 services promptly to the greatest number of customers possible. As the Report states, "the attention of the industry ha[s] shifted from discovering, developing, evaluating and selecting the ways of locating mobile units to integrating the location information into the existing E911 system. That is, with location technologies selected and with the pressure of the Commission deadlines, the focus has shifted increasingly to actual implementation."[3/] To facilitate the continued roll out of Phase II services, it is critical that the Commission refrain from adding new Phase II requirements at this stage in Phase II implementation and that it encourage coalescence around industry-wide standards.[4/] In

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1/ Public Notice, *Wireless Telecommunications Bureau Seeks Comment on Report on Technical and Operational Wireless E911 Issues*, DA 01-2666, WT Docket No. 02-46 (rel. Oct. 16, 2002).

2/ Dale N. Hatfield, *A Report on Technical and Operational Issues Impacting The Provision of Wireless Enhanced 911 Services* (rel. Oct. 15, 2002) ("Hatfield Report").

3/ *Id.* at 12.

4/ *Id.* at 40.

addition, the Commission should provide further clarification regarding the roles and responsibilities of all Phase II stakeholders.

I. THE COMMISSION SHOULD ENCOURAGE THE ESTABLISHMENT OF INDUSTRY-WIDE VOLUNTARY STANDARDS INSTEAD OF ALLOWING PHASE II E911 REQUIREMENTS TO "CREEP"

The Hatfield Report points out that as wireless carriers are attempting to meet the Commission's existing Phase II E911 requirements and milestones, some PSAPs are "pushing for additional functionality or capabilities beyond Phase II."[5/] In addition, the Report states that there are a whole host of issues involving the evolution of wireless networks and E911 systems that both the Commission and the industry will have to address at some point.[6/] As the Telecommunications Industry Association ("TIA") correctly notes, however, the Commission needs to consider carefully "the current and future deployment impact(s) of any proposed changes to E911 location parameters."[7/] In a project the size, scope and complexity of wireless E911, "there is always a danger that constantly changing requirements will lead to scheduling delays."[8/] As discussed below, now is the time for the Commission to focus on eliminating impediments to Phase II implementation – not for layering on new rules, or encouraging PSAPs to ask for and await "new and better" versions of Phase II.

Routing Based on Final Location Information. Requiring AWS and other wireless carriers to accommodate requests for additional capabilities that exceed those specified in the Commission's rules, such as routing E911 calls based only on final location data, has the potential to slow down the carriers' ability to fulfill standard Phase II requests. Currently, AWS uses Phase I cell sector information or an initial "quick-fix" specification from its Phase II

5/ *Id*.

6/ *Id*.

7/ TIA Comments at 3.

8/ Hatfield Report at 40.

vendor to route 911 calls, which in most cases will get the call to the correct answering point.[9/] After the voice call is delivered, the receiving PSAP can "rebid," or query, the Phase II location system, for updated location information. Given the current state of technology, the only alternative to this scenario would be for AWS to hold the call at the wireless switch until the final ALI information becomes available, which could take as long as 30 seconds.[10/] While RCC Consultants, Inc. contends that this (otherwise avoidable) delay in the delivery of the voice portion of the call would be an appropriate trade off for ensuring that a few calls in a few cell sectors are not misrouted,[11/] AWS respectfully disagrees. RCC Consultants' proposal overemphasizes the importance of location data in most situations and, if adopted, could unnecessarily hamper expeditious emergency responses for the majority of 911 callers.[12/]

The Hatfield Report states that the question of routing based on Phase I or Phase II information may not be amenable for resolution by industry consensus without Commission action.[13/] Regardless of whether Commission intervention ultimately may be necessary, however, it is abundantly clear that significantly more industry study is necessary before the Commission can determine the most beneficial and least harmful methods of ensuring proper routing of E911 calls and associated data. Indeed, even as it urges the Commission to alter its rules immediately, RCC Consultants acknowledges that misrouted 911 calls are problematic primarily because the lack of *wireline* E911 tandem interconnection often prevents the effective

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[9/] Even in situations in which a cell sector encompasses more than one PSAP jurisdiction, the majority of calls in that sector flow to only one PSAP.

[10/] The current Phase II systems of Position Determining Entity ("PDE") and Mobile Positioning Center vendors are not capable of routing calls differently within the area served by a single PDE (up to several hundred sectors). Thus, *all* calls in the PDE area must be routed by sector, by an initial quick-fix, or held until the final ALI is available.

[11/] RCC Consultants at 8 (citing test results purportedly demonstrating that calls could be routed to the correct PSAP within 30 seconds of initiation).

[12/] It is AWS' understanding that 911 calltakers routinely ask for a 911 caller's location at the beginning of each call. The 911 calltaker then compares the caller's response with the location information provided by the 911 network, and conducts further inquiries as appropriate.

[13/] Hatfield Report at 39-40.

transfer of location data between PSAPs. Perhaps, therefore, as CML Emergency Services, Inc. explains, the problem could be better resolved through landline tandem interconnection requirements and ensuring that incumbent local exchange carriers ("ILECs") have the means to transfer from one PSAP "calls, data, location, records, recordings, etc., to another PSAP even if it is using different CPE" than by putting wireless carriers and their vendors in the position of compensating for deficiencies in the landline network. Until industry standards bodies have had the opportunity to complete their investigation into E911 routing issues, there is no basis for the Commission to alter its routing requirements as RCC Consultants requests. For the same reasons, AWS also urges the Commission to clarify that wireless carriers are not required to entertain PSAP requests for routing based only on final Phase II information unless and until the Commission adopts such a rule following a notice and comment rulemaking proceeding.

Uncertainty and Confidence Factors. The problem of "requirements creep" also is taking the form of PSAP requests for delivery of uncertainty and confidence factors, along with the basic E911 location information. Neither OET-71 nor the Commission's rules currently contain this requirement, and while it has been contemplated in industry standards, no defined procedures for implementing such measures have yet been established. Even more significantly, the lack of uniform, detailed requirements for uncertainty and confidence factors have led to the use of different assumptions by different vendors and different technologies to calculate these data, although they may be given the same names. The lack of uniform definitions and standards also means that PSAPs have no ability to interpret the measures consistently.

The ESIF Study Group C already "is working to identify a consistent and nationally accepted practice on how best to present the uncertainty factor accompanying a location estimate that is provided to the Public Safety Answering Point (PSAP)."[14/] In light of this action, the

[14/] Alliance for Telecommunications Industry Solutions (ATIS) on Behalf of the Emergency Services Interconnection Forum (ESIF) at 3.

Commission should adopt the Hatfield Report proposal "to encourage the industry to reach voluntary consensus regarding the usefulness of uncertainty and confidence factors and, if the consensus is positive, to reach voluntary consensus on the required standards for the determination, delivery, and utilization of that additional information."[15/] In the meantime, the Commission should confirm that wireless carriers are under no obligation to deliver such factors to PSAPs.

Accuracy Certification. AWS agrees with TIA that "[t]esting and certification is best accomplished by voluntary compliance with industry-approved procedures."[16/] The ESIF plans to develop basic parameters for location accuracy verification[17/] and TIA has expressed its willingness to work closely with the FCC and other regulatory bodies to ensure that testing and certification needs are satisfied.[18/] Additional standards, such as RCC Consultants' intrusive and inflexible proposals, accordingly, are unnecessary to ensure carrier compliance with the Commission's requirements.[19/] Moreover, at this stage in E911 deployment, excessive direction by the Commission would undermine the success of the industry-led process and would force carriers to divert resources from Phase II implementation to satisfying new and potentially burdensome certification rules.

Application of Wireline Standards to Wireless Systems. The notion that wireless E911 should be held to the same standards as the wireline system appears nowhere in the Commission's rules or orders. Notwithstanding this fact, public safety officials often demand that such a requirement be written into their contracts with wireless carriers. RCC Consultants echoes these unrealistic expectations -- asserting that "the wireless 9-1-1 system must provide

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15/ Hatfield Report at 39.

16/ TIA at 5.

17/ ATIS/ESIF at 6.

18/ TIA at 5-6.

19/ *See* RCC Consultants at 4-7.

the same overall availability, reliability, and consistency that, from experience, the public anticipates and expects from landline 9-1-1 services."[20/] This attempt to escalate the Phase II requirements should be rejected in total, because there simply is no comparison between the wireline and wireless 911 systems.

Wireline 911 has been in place for almost half a century and functions reasonably well using 1950s technology. In contrast, wireless Phase II E911 service requires technology that did not exist five years ago and is still being refined today. Consumers fully understand that attempting to locate a caller in a moving vehicle is nothing like looking up a street address based on a fixed telephone line and number. Rather than attempt to force wireless E911 technology into the wireline 911 box, as discussed below, the Commission should ensure that ILECs fulfill their part of the wireless E911 implementation equation.

II. THE COMMISSION SHOULD FURTHER CLARIFY THE ROLES AND RESPONSIBILITIES OF ALL PARTICIPANTS IN WIRELESS E911 IMPLEMENTATION

TruePosition correctly points out that "[t]he most important consideration for the FCC is that, in any effort to bring deployment of the various components [of E911 service] into alignment, it speed up the lagging factors rather than slow the leading factors."[21/] TruePosition, therefore, urges the Commission to continue giving ILEC provisioning very close attention.[22/] As AWS has repeatedly advised the Commission,[23/] ILEC technical readiness and ILEC pricing disputes continue to impede the deployment and integration of Phase II E911 service in many

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[20/] RCC Consultants at 5.

[21/] TruePosition at 4.

[22/] *Id*. at 5.

[23/] *See Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, CC Docket No. 94-102, AT&T Wireless Services, Inc. Interim Report (filed Oct. 18, 2002); *Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, CC Docket No. 94-102, AT&T Wireless Services Inc. Quarterly Report at 3-6 (Nov. 1, 2002); *Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, CC Docket No. 94-102, AT&T Wireless Services Inc. Interim Report at 2-4 (Dec. 2, 2002).

parts of the AWS service footprint. Many commenters concur with this view.[24/] Accordingly, the Commission should continue to focus its efforts on the resolution of these issues by all available means.

In addition to ILEC readiness, the Commission could expedite Phase II E911 deployment by delineating the responsibilities of standards-setting bodies, such as the ESIF. As CML notes, for a consensus-based process to work, "all players must be committed to and involved with the development of industry-wide standards."[25/] Accordingly, the Commission should make clear that industry bodies – particularly the ESIF – have its blessing as they move forward with the difficult task of defining standards for the E911 systems and wireless networks of the future. The ESIF already is deeply involved in many of the issues raised in the Hatfield Report and its continued work in these areas is essential to the success of E911 implementation now and in the future.[26/]

Finally, in situations in which wireless carriers, ILECs, and PSAPs disagree regarding the responsibilities for delayed Phase II deployments, the Commission should be prepared to provide prompt assistance in resolving such disputes. The certification and tolling procedures set forth in the Commission's recent reconsideration of its *Richardson* decision[27/] create an appropriate framework for carriers to document Phase II deployment problems. However, when there are factual disputes between PSAPs and carriers regarding the causes of delays, the carrier seeking a toll of the six-month deployment period "is unable to avail itself of the certification process, but

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[24/] *See, e.g.,* Motorola at 2; Sprint at 8; T-Mobile at 12.

[25/] CML at 7.

[26/] *See* ATIS/ESIF at 2-4 (detailing the activities of four study groups, which are focusing on wireless/wireline integration, wireless/PSAP interconnection, national security, and PSAP readiness).

[27/] *Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems; Petition of City of Richardson, Texas*, CC Docket No. 94-102, Order on Reconsideration, ¶¶ 10-21 (rel. Nov. 26, 2002).

must file with the Commission its proposed certification and the [objecting] PSAP response."[28/] Prompt action by the Commission will be essential to the resolution of these problems and to keeping all parties on track for E911 implementation wherever possible.

CONCLUSION

For the foregoing reasons, the Commission should refrain from adding new requirements for Phase II compliance and should clarify that PSAPs may not demand additional capabilities beyond the existing Phase II rules absent a Commission rulemaking and subsequent order. In addition, the Commission should further delineate the responsibilities of all E911 stakeholders, including ILECs and standards-setting bodies.

Respectfully submitted,

AT&T WIRELESS SERVICES, INC.

/s/ Douglas I. Brandon
Douglas I. Brandon
Vice President - External Affairs
1150 Connecticut Avenue, N.W.
Washington, D.C. 20036
(202) 223-9222

Howard J. Symons
Sara F. Leibman
Bryan T. Bookhard
Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.
701 Pennsylvania Avenue, N.W.
Suite 900
Washington, D.C. 20004
(202) 434-7300

Of Counsel

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[28/] *Id.,* ¶ 16.

I, Bryan T. Bookhard, hereby certify that on this 3rd day of December 2002, I caused copies of the foregoing "Reply Comments of AT&T Wireless Services, Inc." to be sent to the following via e-mail:

_/s/ Bryan T. Bookhard_____

Thomas J. Sugrue
Chief
Wireless Telecommunications Bureau
Federal Communications Commission
445 - 12th Street, SW
Washington, DC 20554

Barry Ohlson
Wireless Telecommunications Bureau
Federal Communications Commission
445 - 12th Street, SW
Washington, DC 20554

Blaise Scinto
Wireless Telecommunications Bureau
Federal Communications Commission
445 - 12th Street, SW
Washington, DC 20554

James Schlichting
Wireless Telecommunications Bureau
Federal Communications Commission
445 - 12th Street, SW
Washington, DC 20554

Patrick Forster
Wireless Telecommunications Bureau
Federal Communications Commission
445 - 12th Street, SW
Washington, DC 20554

Qualex International
c/o FCC
445 12th Street, S.W.
Washington, D.C. 20554